RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE
Serial Number: 09/843,614
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Title: SYNCHRONOUS UPDATING OF DYNAMIC INTERACTIVE APPLICATIONS

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REMARKS

This responds to the Office Action mailed on <u>May 31, 2005</u>.

No claims are amended, canceled, nor added. As a result, claims 1-41 are pending in this application.

Interview Summary

Applicants acknowledge the telephone interview held on or about 27 July 2005 between the Examiner and Applicants' attorney during which claim 1 was generally discussed, as well as the cited reference Howe. The Examiner indicated that further consideration may be required. No agreement was reached. Applicants sincerely thank the Examiner for the interview.

§103 Rejection of the Claims

Claims 1-6, 9-13, 17-30, 33-36 and 40-41 were rejected under 35 USC § 103(a) as being unpatentable over Howe et al. (U.S. 6,502,242) in view of Filepp et al. (U.S. 6,195,661).

Claims 14-16 and 37-39 were rejected under 35 USC § 103(a) as being unpatentable over Howe et al. in view of Filepp et al., and further in view of Chen et al. (U.S. 6,269,374).

Claims 7-8 and 31-32 were rejected under 35 USC § 103(a) as being unpatentable over Howe et al. in view of Filepp et al., and further in view of Wistendahl (U.S. 6,496,981).

Each of these rejections is respectfully traversed.

The Examiner has the burden under 35 U.S.C. §103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir.1988). As part of establishing a *prima facie* case of obviousness, the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would lead an individual to combine the relevant teaching of the references. *Id.*

The court in *Fine* stated that:

Obviousness is tested by "what the combined teaching of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 878 (CCPA 1981)). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *ACS Hosp. Sys.*, 732 F.2d at 1577, 221 USPQ at 933. And "teachings of references can be combined *only* if there is some suggestion or incentive to do so."

Id. (emphasis in original).

The M.P.E.P. adopts this line of reasoning, stating that

"In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ 2d 1438 (Fed.Cir. 1991))." *M.P.E.P.* §2142. (emphasis added.)

Howe relates to:

... an approach for viewer-friendly and virtually instantaneous transitioning from a first analog based television program to a second program, particularly an interactive application program, and further permits a similarly rapid and easily accomplished return to viewing the first program. To accomplish this convenient and virtually instantaneous transition between programs such as a broadcast program and an interactive application or program, the present invention provides a system for permitting a provider of program content to furnish a video service provider with content, such as an interactive program or application, and **for permitting the video service provider to transmit to the Content Provider an identifying code or address, such as an interactive callback address. The video service provider associates this identifying code or address with a location at which the program or application will be stored.** The identifying code or callback address may be a program-specific code that can be used by subscribers to invoke the program from the video services provider directly. Alternatively, the identifying code

may be a common identifying code or callback address (which might be called a "well-known callback address"), used by all subscribing viewers to access a program- or application-specific identifying code or callback address, which is in turn used to invoke the program. According to the present invention, Content Providers may transmit the identifying code or callback address for a second program in coordination with a first program, so that viewers of the first program, who have access to systems operated by the video service provider, may invoke the second program, which may be an interactive program or application, using that identifying code or callback address. (Col. 3, lines 23-54). (emphasis added).

Howe further states:

When the session is terminated, the set top box re-tunes the television signal to the original program channel. (Howe, Abstract).

Howe further states:

Additionally, television viewers, who are accustomed to choosing at will between the available channels with instantaneous results, will expect to pass from one medium (e.g., broadcast) to another (e.g., interactive) "seamlessly" with the push of a button. To accommodate their viewer's needs, programmers may wish to provide broadcast programming, such as a commercial advertisement or a news program, and make available in the context of that program a related interactive television program.

The means by which interactive television and broadcast television are provided, however, are generally quite different. The two media, for example, are typically supplied from different sources and use different modulation techniques over different transmission paths. The originating source of broadcast programming is likely to be remote from those subscribers interested in invoking an interactive service, making telecommunication between the parties over a dedicated network prohibitively expensive and complex. By contrast, interactive servers, in order to avoid the expense of high bandwidth communications over such distances, can be located geographically close to a

corresponding set of subscribers, unlike the programming sources or "Content Providers."
An interactive server can therefore efficiently provide exclusive interactive access to a
large number of applications by a large number of interactive subscribers.

The technical differences between broadcast programming and interactive
applications, combined with the difficulties of providing interactive services at any rate,
make the provision of a smooth transition between interactive and broadcast television a
difficult proposition and a seamless transition from broadcast television to interactive
television and back an elusive goal. (Howe, Background of the Invention, column 2, line
49 to column 3, line 20). (emphasis added).

As is evident from the Abstract, Drawings (e.g., see flowcharts shown in Figures 2B, 3B,
4b and 5B) and the Written Description, Howe describes a system and method for switching
from one channel to another, e.g., from a program channel being viewed to a different interactive
channel, *not switching between two interactive applications.*

In Filepp:

A method for **locating application records** in an interactive-service database is
described. The method features steps for creating multiple search tables which represent
subsets of the database to be interrogated; for example the applications of an interactive
service. In accord with the method, **steps are provided for arranging the tables with
keyword, record locators, indexed to record identifiers** Additionally, the method
includes steps for providing each table with a unique coding and steps for generating
table codes at the user reception system in response to a query for a database record
entered with a variety of search strategies; as for example, character string searching
approximating the record sought, alphabetized record searching, subject matter category
searching and personalized record searching, among others. Further, the method includes
steps for comparing the table code generated with available table codes for the database
to select a table suited for the query. Thereafter, the appropriate table is presented at the

reception system so the table keywords can be reviewed and a desired record selected and presented. (Filepp, Abstract). (emphasis added).

For the following reasons Applicants respectfully submit that the Office Action did not make out a *prima facie* case of obviousness: (1) Howe and Filepp fail to teach or suggest all elements of Applicants' claims; and (2) There is a lack of motivation to combine Howe and Filepp to arrive at the present claims in that: (a) Obviousness may not be established through hindsight; and (b) The Invention as a Whole must be considered in an Obviousness Test.

(1) Even If Combined, Howe And Filepp Fail To Teach Or Suggest All Elements Of Applicants' Claims.

Applicants respectfully submit that the Office Action did not make out a *prima facie* case of obviousness, because Howe and Filepp fail to teach or suggest all of the elements of Applicants' claims. M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

Claim 1 includes the limitations of:

receiving at the broadcast system a broadcast signal including at least one record
of **a first interactive application;**

selecting a second interactive application, and broadcasting records of the
second interactive application to the reception device **in place of at least
some of the records of the first interactive application, for execution of
the second interactive application by the reception device;**

receiving at the broadcast system in the broadcast signal one or more additional
records of the first interactive application; and

broadcasting from the broadcast system selected ones of the additional records to
the reception device, **for execution of the second interactive application
in conjunction with the additional records (emphasis added).**

It is submitted that numerous limitations of claims 1 are not described or even suggested in either Howe or Filepp. For example, both Howe and Filepp neither disclose nor even suggest the limitations of "selecting a second interactive application, and broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application, for execution of the second interactive application by the reception device" and "broadcasting from the broadcast system selected ones of the additional records to the reception device, for execution of the second interactive application in conjunction with the additional records."

However, the Office Action submits that the limitations of claims 1 are shown in Figures 1, 6, and 10 and at Col. 19, lines 25-55. Figures 1, 6 and 10 show an interactive server but do not in any way disclose or even suggest the limitations of "broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application, for execution of the second interactive application by the reception device" and "broadcasting from the broadcast system selected ones of the additional records to the reception device, for execution of the second interactive application in conjunction with the additional records." Col. 25-55 also fails to disclose these limitations.

Additionally, at page 16, the Office Action submits that "Howe disclosed replacing one interactive application with a second interactive application." As shown and discussed above, Howe, in fact, clearly discloses switching from a program channel being viewed to a different interactive channel, again, *not switching between two interactive applications.*

Further, at page 16, the Office Action submits that column 3, lines 65 to column 4, lines 1-5 of Howe, and column 19, lines 25-60 of Howe suggests that Howe disclosed having a first interactive application and a customized (second) version of the said interactive application. First, Applicants respectfully submits that there is no suggestion in column 3, lines 65 to column 4, lines 1-5 ('screen image indicating the availability of additional content from the video service provider') or column 19, lines 25-60 of Howe to indicate two interactive applications. In addition, there is no indication in column 3, lines 65 to column 4, lines 1-5 or column 19, lines 25-60 of Howe to suggest that the 'screen image indicating the availability of additional content

from the video service provider' is generated *on a first interactive application*, <u>and</u> there is no

indication in Howe that the 'screen image' is regarding a *second* interactive application.

In view of the above, it is submitted that claim 1 is allowable. As claims 2-17 are

dependent upon claim 1, they are also allowable.

Claim 40 also includes the limitation of "broadcasting records of the customized version

of the first interactive application to the reception device in place of the records of the first

interactive application... for execution of the customized application in conjunction with the

additional record." In view of the above it is also submitted that claim 40 is allowable.

Claim 41 includes the limitations of:

receiving at the broadcast system a broadcast signal including at least one record
　　　　of a first interactive application;

selecting a second interactive application, and broadcasting records of the second
　　　　interactive application to the reception device in place of at least some of the
　　　　records of the first interactive application, for execution of the second interactive
　　　　application by the reception device;

receiving at the broadcast system in the broadcast signal one or more additional
　　　　records of the first interactive application; and

providing to a broadcast system selected ones of the additional records for
　　　　broadcast to the reception device, for the reception device to execute of the
　　　　second interactive application in conjunction with the additional records.

In view of the remarks above it is submitted that claim 41 is also allowable.

Claim 18 includes the limitations of:

　　　　　　a server that maintains state information for the first interactive application in

response to the output signals from the code detector, and in response to the state of the first interactive application, outputs commands to start or stop the output of updated records of the interactive application;

a code reader, adapted to read interactive application codes of an interactive application and to identify records of the first interactive application that are updates of corresponding records of a second interactive application stored in a broadcast server, and communicatively coupled to the server, that selectively provides the updated records to the broadcast server in response to the commands from the server...

The Office Action submits that the above limitations are described at Col. 18, lines 40-50 in Howe. The referenced section reads as follows:

After receiving the request for the ICA, the interactive server 5 assigns an ICA consistent with the state of the interactive server 5 and its memory 8 and other storage devices 8A and 9. The video service provider 1 also stores the application received from the Content Provider in a suitable storage device, such as video storage 9, and stores the ICA and perhaps information relating to the interactive application in a database maintained, for example, in disk storage 8A. Such additional information may include an application ID selected by the video service provider 1. (Howe, column 18, lines 40-50).

It is submitted that the above section in no way describes or even suggests all the limitations of claim 18 as set out above. For example, the above section from Howe does not describe or even suggest the limitation of "a code reader, adapted to **read interactive application codes** of an interactive application and to identify records of the **first interactive application that are updates of corresponding records of a second interactive application** stored in a broadcast server." (emphasis added). This limitation is also not described or even suggested in Filepp.

In view of the above, it is submitted that claim 18 is allowable. As claims 19-39 are dependent upon claim 18, they are also allowable.

(2) There Is A Lack Of Motivation To Combine Howe And Filepp To Arrive At Present Claims.
(a) Obviousness May Not Be Established Through Hindsight.

The Examiner must avoid hindsight. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990). "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." *Para-Ordnance Mfg., Inc. v. SGS Importers Int'l, Inc.*, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), *cert. denied*, 117 S.Ct. 80 (1996) citing *W.L. Gore & Assocs. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13, cert. denied, 469 U.S. 851 (1984).

Because Howe teaches switching between a broadcast program and an interactive application, and because Filepp teaches locating records in a database, the only way to combine Howe and Filepp is through hindsight. There is simply no reason for one skilled in the art to look to Filepp to switch between a broadcast program and an interactive application.

Because obviousness may not be established using hindsight and may not be established in view of the teachings or suggestions of the Applicants, the Action does not show that there is some suggestion or motivation to combine Howe and Filepp. For this additional reason, the Office Action has not established a *prima facie* case of obviousness for independent claims 1, 18, 40, and 41, and their respective dependents.

(B) The Invention As A Whole Must Be Considered In An Obviousness Test.

The test for obviousness under §103 must take into consideration the invention as a whole; that is, one must consider the particular problem solved by the combination of elements that define the invention. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985). This is <u>part</u> of the "subject matter as a whole" which should always be considered in determining the obviousness of an invention under 35 USC §103. *In re Spinnoble,* 405 F. 2d 578, 585, 160 USPQ 237, 243 (CCPA 1969). MPEP §2141.02.

In addition to the differences listed above, the problems that the Howe reference and the current application are trying to solve are quite different. Applicants respectfully submit that Howe is directed to solving problems associated with switching between a broadcast program and an interactive application, not in switching between two interactive applications. This problem of Howe is emphasized with a discussion of difficulties in switching due to the differences between broadcast television and interactive television, in that they are of *different* mediums from *"different* sources and use *different* modulation techniques over *different* transmission paths." (Howe, Background of the Invention, column 2, line 49 to column 3, line 20). (emphasis added).

In contrast, Applicants are attempting to update an interactive or customized application broadcast from a broadcast system to a reception device. Applicants attempt to solve these problems by, e.g. as claimed in claim 1, receiving at the broadcast system a broadcast signal including at least one record of a first interactive application; selecting a second interactive application, and broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application, for execution of the second interactive application by the reception device; receiving at the broadcast system in the broadcast signal one or more additional records of the first interactive application; and broadcasting from the broadcast system selected ones of the additional records to the reception device, for execution of the second interactive application in conjunction with the additional records.

There is no indication in Howe that Howe is attempting to update an interactive or customized application broadcast from a broadcast system to a reception device in the manner claimed in the present application. Therefore, Howe and Applicants are clearly attempting to solve different problems and therefore seek very different solutions.

The problems that the Filepp reference and the current application are trying to solve are also quite different. Applicants respectfully submit that Filepp is directed to solving problems associated with locating records in a database. (Filepp, Summary, col. 2, lines 48-64).

There is no indication in Filepp that Filepp is attempting to update an interactive or customized application broadcast from a broadcast system to a reception device in the

manner claimed in the present application. Therefore, Filepp and Applicants are clearly attempting to solve different problems and therefore seek very different solutions.

Accordingly, there is clearly no suggestion or motivation in Howe or Filepp or to those skilled in the art to combine these references to arrive at the present claims. Because of lack of motivation to combine Howe and Filepp to arrive at the present claims, the rejection under 35 U.S.C. § 103(a) cannot stand. Applicants respectfully request reconsideration and allowance of independent claims 1, 18, 40, and 41.

Dependent Claims

Claims 2-17 and 19-39 depend from independent claims 1 or 18 and incorporate all of the limitations therein, respectively. Claims 2-17 and 19-39 are also asserted to be allowable for the reasons presented above, and Applicants respectfully request notification of same. Applicants consider additional elements of claims 2-17 and 19-39 to further distinguish over the cited references, and Applicants reserve the right to present arguments to this effect at a later date.

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CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney 352-373-8804 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.
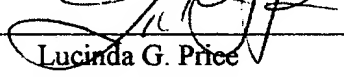
Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop AF, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this __1__ day of August, 2005.

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